

AMENDMENT

Please amend the application as follows:

In the claims:

Please cancel claims 11-13, 16, and 47-49, without prejudice.

Please replace claims 1-4, 9, 10, 14, 28, 29, 46, and 50 with amended claims 1-4, 9, 10, 14, 28, 29, 46, and 50 as follows:

F1

-- 1. (4x Amended) An isolated or recombinant nucleic acid consisting of a nucleic acid sequence having at least 75% sequence identity to SEQ ID NO:3, or its complement, wherein the nucleic acid selectively hybridizes to SEQ ID NO:3 or its complement.

F2

2. (3x Amended) An isolated or recombinant nucleic acid fragment of a nucleic acid of claim 1, 4, or 45, wherein the nucleic acid fragment is 10 to 20 to 30 nucleotides and selectively hybridizes to SEQ ID NO:3 or its complement.

F3

3. (4x Amended) An isolated or recombinant nucleic acid fragment of a nucleic acid of claim 1, 4, or 45, wherein the nucleic acid fragment is 30 nucleotides or more and selectively hybridizes to SEQ ID NO:3 or its complement.

4. (4x Amended) An isolated or recombinant nucleic acid consisting of a sequence as set forth in SEQ ID NO:3, or its complement.

F4

9. (3x Amended) The nucleic acid of claim 1, 4, or 45, or fragments thereof that selective hybridize to SEQ ID NO:3, comprising a label.

F5

10. (4x Amended) An isolated or recombinant nucleic acid fragment of claim 1, 4, or 45, wherein the nucleic acid fragment is between about 15 and about 200 residues

F5 Cont

in length; is between about 25 and about 100 residues in length; or is between about 35 and about 75 residues in length.

F6

14. (4x Amended) A transformed cell comprising the nucleic acid of claim 1, 4, or 45, or fragments thereof that selectively hybridize to SEQ ID NO:3.

F7

28. (4x Amended) A kit for detecting the presence of nucleic acid sequences associated with GCA in a sample comprising at least one type of nucleic acid of claim 1, 4, or 45, wherein the nucleic acid selectively hybridizes to SEQ ID NO:3 or its complement.

29. (4x Amended) A kit for detecting the presence of nucleic acid sequences associated with GCA in a sample comprising at least one type of nucleic acid fragment of claim 2.

F8

46. (2x Amended) A method for detecting the presence of SEQ ID NO:3 for diagnosing GCA comprising the following steps:

- (a) providing a nucleic acid of claim 1, 4, or 45, or fragments thereof that selectively hybridize to SEQ ID NO:3;
- (b) providing a tissue sample comprising nucleic acids;
- (c) contacting the nucleic acid with the nucleic acids in the sample under hybridizing conditions; and
- (d) detecting whether the nucleic acid hybridizes to a nucleic acid in the sample, wherein the specific hybridization indicates the presence of SEQ ID NO:3 in the sample and is diagnostic for GCA.

F9

50. (Amended) The method of claim 62, wherein the amplification is by polymerase chain reaction (PCR). --

Please add claims 51-62.

-- 51. The nucleic acid of claim 1, wherein the nucleic acid has a sequence having 80% identity to the sequence of SEQ ID NO:3 or its complement.

52. The nucleic acid of claim 1, wherein the nucleic acid has a sequence having 85% identity to the sequence of SEQ ID NO:3 or its complement.

53. The nucleic acid of claim 1, wherein the nucleic acid has a sequence having 90% identity to the sequence of SEQ ID NO:3 or its complement.

54. The nucleic acid of claim 1, wherein the nucleic acid has a sequence having 95% identity to the sequence of SEQ ID NO:3 or its complement.

55. The nucleic acid of claim 1, wherein the nucleic acid has a sequence having 98% identity to the sequence of SEQ ID NO:3 or its complement.

F10 56. The nucleic acid of claim 1, 4, or 45, or fragments thereof that selectively hybridize to SEQ ID NO:3, wherein the nucleic acid is flanked by heterologous nucleotides.

57. The nucleic acid of claim 56, wherein the heterologous nucleotides comprise an expression vector.

58. A transformed cell comprising the expression vector of claim 57.

59. A kit for detecting the presence of nucleic acid sequences associated with GCA in a sample comprising at least one type of nucleic acid fragment of claim 3.

60. A kit for detecting the presence of nucleic acid sequences associated with GCA in a sample comprising at least one type of nucleic acid fragment of claim 10.

61. An array comprising the nucleic acid of claim 1, 4, or 45, or fragments thereof that selectively hybridize to SEQ ID NO:3.

62. A method for detecting the presence of SEQ ID NO:3 for diagnosing GCA comprising the following steps:

- F10
Cont
- (a) providing at least two different nucleic acids of claim 1, 4, or 45, or fragments thereof that selectively hybridize to SEQ ID NO:3 to be used as amplification primer pairs;
 - (b) providing a tissue sample comprising nucleic acids;
 - (c) contacting the nucleic acids with the nucleic acids in the sample under amplification reaction conditions; and
 - (d) detecting whether the primer pair has amplified products, wherein amplified products indicate the presence of SEQ ID NO:3 in the sample and is diagnostic for GCA. --